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REMARKS

Applicants appreciate the courtesy shown by the Examiner and his supervisor Long Le in discussing this case with the Applicants' representative, Rong Yang, on December 24, 2008. During the interview, the Examiners agreed that Frey (US 6,100,626) does not meet at least claim 9, which requires that a sensor ground substrate and a cable substrate be connected directly or via a relay ground substrate, and indicated withdrawal of the anticipation rejection. The discussions of the interview are reflected in the following remarks.

Reconsideration is requested in view of the following remarks. Claims 9-17 remain pending in the application.

Claim Rejections - 35 USC § 102

Claims 9-17 are rejected under 35 USC § 102(e) as being anticipated by Frey (US 6,100,626). Applicants respectfully traverse this rejection.

Claim 9 requires that a sensor ground substrate and a cable substrate be connected directly or via a relay ground substrate. Claim 9 further requires that at least a part of the cable substrate be covered with the sensor ground substrate or the relay ground substrate.

In one example, the sensor ground substrate connected from the piezoelectric element can be connected directly to the cable substrate. In another example, the sensor ground substrate can be connected or, in another word, relayed to the ground of the cable substrate by a relay ground substrate. This arrangement helps reduce the ground resistance between the sensor ground substrate and the ground of the cable substrate, and thus helps reduce a noise current flow through the ground due to ground potential difference. This would help reduce the image noise and improve the quality of the image obtained (see the paragraph bridging pages 2 and 3 and page 3, lines 6-10 of the specification, among other places).

As the Examiners agreed in the telephone interview, Frey et al. fail to disclose that a sensor ground substrate and a cable substrate are connected directly or via a relay ground substrate, as required by claim 9. Instead, Frey et al. discuss a system for connecting signal lines to a coaxial cable in an ultrasound probe (see Frey et al., Abstract

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and Fig. 3). Frey et al. are completely silent as to a sensor ground substrate that is connected directly to a cable substrate or connected to the cable substrate via a relay ground substrate, as required by claim 9.

Nor do Frey et al. disclose at least a part of the cable substrate being covered with the sensor ground substrate or the relay ground substrate, as required by claim 9. In fact, Frey et al. confirm that conductive trace 18 on transducer flex circuit 2 has a terminal that overlaps and is electrically connected to a terminal of a corresponding conductive trace 24 on fanout flex circuit 6 in the overlap region X (see Frey et al., col. 3, lines 21-26 and Figs. 3 and 4). This is distinct from the invention of claim 9, which requires at least a part of the cable substrate being covered with the sensor ground substrate or the relay ground substrate.

For at least these reasons, claim 9 is patentable over Frey et al. Claims 10-17 depend ultimately from claim 9 and are patentable along with claim 9 and need not be separately distinguished at this time. Applicants are not conceding the relevance of the rejection to the remaining features of the rejected claims.

In view of the above, favorable reconsideration in the form of a notice of allowance is respectfully requested. Any questions regarding this communication can be directed to the undersigned attorney, Douglas P. Mueller, Reg. No. 30,300, at (612) 455-3804.



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DPM/cy

Respectfully submitted,

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